

REMARKS

In response to the Office Action dated February 8, 1996, Applicants respectfully request reconsideration and withdrawal of the rejections of the claims.

Claims 15, 18, 33 and 35 were rejected under the second paragraph of 35 U.S.C. §112, as being indefinite. In response thereto, claims 18 and 35 have been amended to remove the basis for the rejection of these claims. In addition, claims 17 and 34 have been amended to correct a minor error noted therein.

The rejection of claims 15 and 33 states that the phrase "wherein a vector" is not defined or introduced in a previous claim. It is not seen how this fact forms a basis for a rejection under §112. Specifically, the determination of the vector is introduced as a new limitation in claims 15 and 33 themselves. As such, it does not need to be recited in a previous claim. Hence, it is not seen why the claims are considered to be indefinite. If the rejection of claims 15 and 33 is maintained, the Examiner is respectfully requested to explain the basis for the ground of rejection, so that Applicants can respond more fully.

All claims pending in the application were rejected under 35 U.S.C. §103 as being unpatentable over the previously applied Bussey et al reference in view of the newly applied Sheth et al reference. Basically, the rejection alleges that it would be obvious to apply the teachings of the Sheth et al patent, which discloses the assignment of relevance points to individual articles, in the message filtering system of the Bussey et al patent. It is respectfully submitted, however, that even if the teachings of the references are combined, the resulting system would not be the same as the presently claimed invention.

As pointed out in detail in Applicants' previous response, the Bussey et al reference discloses a passive information filtering system. Information flows in one direction from an external broadcast source, and is either allowed or not allowed to reach users, depending on certain filtering criteria. This system requires the use of keywords, which are supplied in some cases by the information sources. In order to pass a particular user's filter, the keyword in a user profile must have sufficient overlap with the keywords assigned to the items of information. If the overlap does not exist, the item of information never reaches the user.

In contrast to an information filtering system of the type disclosed in the Bussey et al reference, the present invention does not function to selectively present only certain items of information to a user. Rather, its objective is to enhance the flow of information within a community. Unlike the Bussey et al system, the present invention does not prevent a user from viewing any particular item of information. Rather than selectively filtering items of information based on keywords or the like, the system of the present invention ranks the likely degree of interest for each of the available items of information in accordance with a user profile. Then, the items of information are presented to the user in order of ranking. As such, the user is provided with the potential to view all available items of information, not just those selected by a filtering algorithm. The significance of this functionality is the fact that, if the user selects a low-ranked item of information and indicates an interest in it, that item of information can be factored into the user's profile. In a filtering system of the type disclosed in the Bussey et al

reference, however, a lowly ranked item of information would never reach the user, because it will be filtered out, and hence cannot be used to adjust the user's profile.

Referring to claim 1, for example, it recites an information access system which includes, among other features, "means for ranking the likely degree of interest for each of the available items of information in accordance with a user profile;" and "means for presenting the items of information to an access device in order of ranking and enabling a user to retrieve each item" (emphasis added). A filtering system of the type disclosed in the Bussey et al reference does not permit a user to retrieve each available item of information, as recited in the claim. Rather, the user can only gain access to those items which pass the filtering threshold. This distinction between the subject matter of claim 1 and the Bussey et al reference is not addressed in the Office Action, and was apparently overlooked in the formulation of the rejection.

The newly cited Sheth et al patent does not overcome this distinction. Like the Bussey et al reference, the Sheth et al reference is also directed to an information filtering system, in which only selected articles are presented to the viewer. In the operation of the Sheth et al system, a user defines one or more news categories, each of which consists of a population of filtering agents (see Section 3, "The Algorithm"). As explained in Section 3.3, each agent looks up the articles in its newsgroup, and assigns them relevance points based upon information appearing in an article header. As stated in the penultimate sentence of this Section, "The articles with high scores are retrieved, the rest are filtered away." Thus, it can be seen that the system of the Sheth et al publication operates in a manner similar to that of the Bussey et al publication. Only selected items

of information are retrieved and presented on the user's display. The user is not given the ability to access and retrieve each item of information, as recited in claim 1.

Accordingly, it is respectfully submitted that the Bussey et al and Sheth et al publications do not suggest the subject matter of claim 1 to one of ordinary skill in the art, whether considered individually or in combination.

Claims 2-16 and 28-33 were summarily rejected on the same grounds as claim 1. It does not appear that the merits of these claims were considered separately from claim 1. However, as pointed out in Applicants' previous response, these claims recite features in addition to the subject matter recited in claim 1. Rather than repeat those arguments herein, the Examiner is referred to Applicants' previous response at pages 9 and 10. It is not apparent how the references are being interpreted to disclose the subject matter recited in the claims identified in the previous response. For example, claim 7 recites that ranking is carried out on the basis of a combination of the content of the item "and correlation with indications of interest in that item provided by other users." The Office Action does not identify where either of the two applied references discloses the concept of ranking items of information on the basis of interest expressed by other users, let alone a combination of such other user's interest and the content of the item. If the rejection is maintained for any of the claims which are discussed on pages 9 and 10 of Applicants' previous response, the Examiner is respectfully requested to identify the specific portions of the references that are deemed to disclose the subject matter recited in these claims.

With respect to claim 17, the Office Action alleges that the Bussey et al publication discloses a method which includes the step of storing item of information in

an unstructured database, with particular reference to Section 3.1, first paragraph. In fact, as pointed out in Applicants' previous response, information is not stored in an unstructured database in the system of the Bussey et al publication. Referring to the present application at page 6, lines 10-14, in the context of the present invention an "unstructured" database is one in which messages are not classified under different topic categories or otherwise arranged in a structured manner. In contrast, the Bussey et al reference explicitly discloses the classification of articles as they are received from the news sources. Section 3.1, which is identified in the Office Action, states "Newly received articles are classified according to subject matter by the classification process . . ." The structure underlying the database is explicitly mentioned in Section 3.3, which states "This structure is reflected in the database, where records in information item relations define the tree of information items that an article comprises" (emphasis added). Thus, contrary to the assertion in the Office Action, the Bussey et al reference does not disclose the concept of storing items of information in an unstructured database, as recited in claim 17.

Claims 18-20, 22-27 and 34-39 were summarily rejected, without discussion of the individual merits of these claims. Again, for the reasons discussed previously, it is respectfully submitted that the rejection of these claims is improper. For example, claims 22-25 and 34-39 recite that the determination of the user's likely degree of interest in an item is based, at least in part, upon indications of interest provided by other users. The Office Action does not explain how either of the references is being interpreted to disclose such a concept.

For the foregoing reasons, it is respectfully submitted that the subject matter of the claims pending in the application is not suggested to one of ordinary skill in the art by the Bussey et al and Sheth et al references, whether considered alone or in combination. Reconsideration and withdrawal of the rejection of the claims is respectfully requested.

Respectfully submitted,

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